

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C. 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing: 06 July 2000 (06.07.00)	
International application No.: PCT/AU99/01145	Applicant's or agent's file reference: 2084744:KJB
International filing date: 22 December 1999 (22.12.99)	Priority date: 23 December 1998 (23.12.98)
Applicant: HELLER, Patrick, Alexander et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International preliminary Examining Authority on:
23 May 2000 (23.05.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was


☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer:</p> <p>J. Zahra</p> <p>Telephone No.: (41-22) 338.83.38</p>
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU99/01145

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁷ : F16K 7/12, 27/02, 27/00, 27/12, 31/128, 31/10, 31/08, F16J 13/02, 13/12, 13/24, B65D 90/10, 39/08, 39/10, 45/30 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC (7) : F16K 7/12, 7/20, 27/02, 27/00, 27/12, 31/128, 31/10, 31/08, F16J 13/02, 13/12, 13/24, B65D 90/10, 39/08, 39/10, 45/30, 41/04, 41/06, 43/06,		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched AU : IPC AS ABOVE		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	<u>First invention</u>	
Y	EP 97581 A (SAUNIER DUVAL EAU) 4 January 1984	1-13
Y	WO 98/08150 A1 (FISHER CONTROLS Int. Inc.) 26 February 1998	1-13
Y	US 5529280 A (SATO) 25 June 1996	1-13
	<u>Second invention</u>	
X	US 3877597 A (MONTGOMERY) 15 April 1975 (See column 2, lines 19-27)	14,15,17,18
X	US 4781311 A (DUNNING) 1 November 1988 (See column 4 lines 12-21)	14,15,17,18
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search 25 February 2000		Date of mailing of the international search report 28 FEB 2000
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  DAVID LEE Telephone No.: (02) 6283 2107

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU99/01145

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 2719014 A1 (WALLMARK) 2 November 1978	14
X	DE 3112516 A1 (GERDES GmbH) 14 October 1982	14,15,17,18
X	US 4669624 A (WILES) 2 June 1987	14,15,17,18
X	GB 2080774 A (AISIN SEIKI KK) 10 February 1982	14,15,16,18-20
 <u>Third invention</u>	
X	AU 11249/76 A (HANSEN) 1978	24-29
X	AU 85606/82 A (ZUKAUSKY) 20 January 1983	24-29
X	US 4179096 A (FROMFIELD) 18 December 1979	24-32
X	WO 97/04260 A1 (THORPE) 6 February 1997	24-29

INTERNATIONAL SEARCH REPORT

International application No.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

First invention : Claims 1-13,

Second invention : Claims 14-23,

Third invention : Claims 24-38. (Details of explanation on extra sheet)

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU99/01145

Box II (continuation)

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1-13 are directed to a valve where "the valve seat is located at an elevation at or below the uppermost edge of the inlet and the diaphragm is located at an elevation above the uppermost edge of the inlet" It is considered that " the valve seat is located at an elevation at or below the uppermost edge of the inlet and the diaphragm is located at an elevation above the uppermost edge of the inlet " comprises a first "special technical feature".
2. Claims 14-23 are directed to a valve body & cover that enable a predetermined torque to be reached but not exceeded when the two members are tightened together. It is considered that a predetermined torque to be reached but not exceeded when the two members are tightened together comprises a second "special technical feature".
3. Claims 24-38 are directed to an operator to close a valve the operator having first and second sides performing different but related functions. It is considered that " the operator having first and second sides performing different but related functions" comprises a third "special technical feature".

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist.

Accordingly the international application does not relate to one invention or to a single inventive concept, a priori.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/AU99/01145

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
EP	97581	DE 3366251	FR 2528932		
WO	98/08150	AU 41542/97	CN 1231735	EP 920657	US 5964446
US	5529280	JP 08152072			
US	3877597	-			
US	4781311	AU 46263/85	EP 176206	ES 288976	JP 61082860 A2
DE	2719014	-			
DE	3112516	-			
US	4669624	DE 36156673	FR 2588834	GB 2181721	
GB	2080774	AU 71635/81	DE 3121873	US 4353479	JP 57007527 A2
AU	11249/76	-			
AU	85606/82	BR 8204417	CA 1195310	US 4387878	US 4534537
US	4179096	AU 45982/79	CA 1085802		
WO	97/04260	AU 65091/96	NZ 313098	US 5954311	
					END OF ANNEX

PATENT COOPERATION TREATY
PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)


REC'D 10 NOV 2000

WIPO

PCT

Applicant's or agent's file reference 2084744	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International application No. PCT/AU99/01145	International filing date (<i>day/month/year</i>) 22 December 1999	Priority Date (<i>day/month/year</i>) 23 December 1998
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ F16K 7/12, 27/02, 27/00, 27/12, 31/128, 31/10, 31/08, F16J 13/02, 13/12, 13/24, B65D 90/10, 39/08, 39/10, 45/30		
Applicant GOYEN CONTROLS CO PTY LIMITED et al		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.																								
2.	This REPORT consists of a total of 5 sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of sheet(s).																								
3.	This report contains indications relating to the following items: <table style="width: 100%;"> <tr> <td style="width: 5%;">I</td> <td style="width: 5%;"><input checked="" type="checkbox"/></td> <td>Basis of the report</td> </tr> <tr> <td>II</td> <td><input type="checkbox"/></td> <td>Priority</td> </tr> <tr> <td>III</td> <td><input type="checkbox"/></td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td>IV</td> <td><input checked="" type="checkbox"/></td> <td>Lack of unity of invention</td> </tr> <tr> <td>V</td> <td><input checked="" type="checkbox"/></td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td>VI</td> <td><input type="checkbox"/></td> <td>Certain documents cited</td> </tr> <tr> <td>VII</td> <td><input type="checkbox"/></td> <td>Certain defects in the international application</td> </tr> <tr> <td>VIII</td> <td><input checked="" type="checkbox"/></td> <td>Certain observations on the international application</td> </tr> </table>	I	<input checked="" type="checkbox"/>	Basis of the report	II	<input type="checkbox"/>	Priority	III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input checked="" type="checkbox"/>	Lack of unity of invention	V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input type="checkbox"/>	Certain documents cited	VII	<input type="checkbox"/>	Certain defects in the international application	VIII	<input checked="" type="checkbox"/>	Certain observations on the international application
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VIII	<input checked="" type="checkbox"/>	Certain observations on the international application																							

Date of submission of the demand 23 May 2000	Date of completion of the report 2 November 2000
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer DAVID LEE  Telephone No. (02) 6283 2107

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
 pages , filed with the demand,
 pages , received on with the letter of
- ☐ the claims, pages , as originally filed,
 pages , as amended (together with any statement) under Article 19,
 pages , filed with the demand,
 pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,
 pages , filed with the demand,
 pages , received on with the letter of
- ☐ the sequence listing part of the description:
 pages , as originally filed
 pages , filed with the demand
 pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☒ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority and International Preliminary Examination Authority have found that there are different inventions as follows:

1. Claims 1-13 are directed to a valve where "the valve seat is located at an elevation at or below the uppermost edge of the inlet and the diaphragm is located at an elevation above the uppermost edge of the inlet" It is considered that " the valve seat is located at an elevation at or below the uppermost edge of the inlet and the diaphragm is located at an elevation above the uppermost edge of the inlet " comprises a first "special technical feature".
2. Claims 14-23 are directed to a valve body & cover that enable a predetermined torque to be reached but not exceeded when the two members are tightened together. It is considered that a predetermined torque to be reached but not exceeded when the two members are tightened together comprises a second "special technical feature".
3. Claims 24-38 are directed to an operator to close a valve the operator having first and second sides performing different but related functions. It is considered that " the operator having first and second sides performing different but related functions" comprises a third "special technical feature".

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist.

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
- ☒ the parts relating to claims Nos. 1-13

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-13	YES
	Claims	NO
Inventive step (IS)	Claims	YES
	Claims 1-13	NO
Industrial applicability (IA)	Claims 1-13	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

EP 97581, WO 98/08150, US 5529280

Novelty - Claims 1-13

None of the citations show the combination of features in claim 1, in particular, (a) the valve seat located at or below the uppermost edge of the inlet, (b) diaphragm at an elevation above the uppermost edge of the inlet and (c) valve seat co-axial with the outlet pedestal.

Hence, claims 1-13 are novel.

Inventive step - Claims 1-13

The US citation discloses all the features of claim 1 except the feature of the valve seat is not at or below the uppermost edge of the inlet - it is, it seems, above this edge.

The EP citation shows all the features of claim 1 except the diaphragm is not above the uppermost edge of the inlet - it is rather approximately equal in elevation.

This variation in the position alone of the features, considering each citation has all the other features, seems not to alter the way each valve assembly operates, ie they all seem to operate in exactly the same way. Hence, there seems to be no inventive step or particular advantage in the positions of claim 1.

The description touches on this issue on page 5, lines 9-20, but the EP citation which has the valve seat "below", clearly has the same advantages as the current valve. The description does not elaborate on the issue of why the chosen position for the diaphragm though should serve to be an advantage over this EP citation.

Hence, claims 1-13 lack an inventive step.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 29 is within claim 28.